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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/517,176	03/02/2000	Yoshikatsu Fujii	501.38264X00	4516

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ANTONELLI TERRY STOUT AND KRAUS
SUITE 1800
1300 NORTH SEVENTEENTH STREET
ARLINGTON, VA 22209

EXAMINER

HABERMEHL, JAMES LEE

ART UNIT	PAPER NUMBER
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2651

DATE MAILED: 10/03/2002

7

Please find below and/or attached an Office communication concerning this application or proceeding.

PR4

Office Action Summary

Application No.

09/517,176

Applicant(s)

FUJII ET AL.

Examiner

James L. Habermehl

Art Unit

2651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2 March 2000, 21 September 2000, and 16.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6 is/are allowed.
- 6) ☒ Claim(s) 1-5, 7 and 9 is/are rejected.
- 7) ☒ Claim(s) 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 March 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 and 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 9 is rejected under 35 U.S.C. 102(b) as being anticipated by Shioya et al. Shioya et al. Figure 5 and col. 6, line 54 through col. 7, line 43 meet all the limitations of the claims, where a function to detect a back electromotive force and to output a signal corresponding to the back electromotive force is taught at least at col. 7, lines 16-27.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject

matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Funches in view of Shioya et al. Funches Figures 1-5 meet all the limitations of the claims, except for showing wherein the drive executes an idle seek operation by using the back electromotive force of the VCM without amplifying the information read from the disk.

Shioya et al. Figure 5 and col. 6, line 54 through col. 7, line 43 show the drive executes an idle seek operation by using the back electromotive force of the VCM without amplifying the information read from the disk for the purpose of stopping the flow of the sense current and prolonging the life of the MR head. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Funches to enable use of the teaching of Shioya et al. of executing idle seeks using back electromotive force without amplifying information, the motivation being to stop the flow of the sense current and prolong the life of the MR head.

The limitations of claims 1-3 and 5 are met by the operation of the combination as disclosed above, where the repetitive claimed method steps are met when the combination executes second and subsequent idle seeks after the first. The additional limitations of claim 4 are met in the alternative as the combination as disclosed above does disclose repeating the idle seek and controlling the velocity;

therefore it necessarily must then have a period such that said seek velocity is kept at a constant value.

7. Claim 6 is allowed over the prior art of record. Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record fails to disclose or suggest a magnetic disk drive comprising amplifying, after the idle seek operation, the information read from the magnetic disk and obtaining information concerning the position of the magnetic head, and then changing the direction of the idle seek operation, as presented in the environment of claim 6.

The prior art of record fails to disclose or suggest a magnetic disk drive comprising a magnetic disk with 8000 cylinders, where the direction of the idle seek is reversed when the magnetic head is in a range from the 0th to 500th cylinder and in a range from the 7500th to 8000th cylinder on the disk, as presented in the environment of claim 8.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Felts et al. Figures 1 and 3 show burnishing the disk by

Art Unit: 2651

seeking across the disk in a fashion similar to applicant's idle seek. Shrinkle
Figures 2, 7-8, and 12-14 show starting and stopping in a fashion similar to
applicant's idle seek.


Any inquiry concerning this communication or earlier communications from
the examiner should be directed to James L Habermehl whose telephone number is
(703)305-6975. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the
examiner's supervisor, David Hudspeth can be reached on (703)308-4825. The fax
phone numbers for the organization where this application or proceeding is
assigned are (703)308-9051 for regular communications and (703)746-5883 for After
Final communications.

Any inquiry of a general nature or relating to the status of this application or
proceeding should be directed to the receptionist whose telephone number is
(703)305-0286.



Habermehl/jlh
October 1, 2002



DAVID HUDSPETH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600